

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-26. (Canceled)

27. (New) An isolated nucleic acid molecule comprising a nucleotide sequence greater than 95% identical to SEQ ID NO:1, said nucleic acid molecule encoding a polypeptide that contains a cyclin domain, wherein the polypeptide functions to maintain normal pairing of homologous chromosomes-during meiotic prophase I in meiotic cells of plants.

28. (New) The nucleic acid molecule of claim 27, wherein the cyclin domain comprises amino acids 361 through 521 of SEQ ID NO:2.

29. (New) The isolated nucleic acid molecule of claim 28 comprising nucleotides 1238-1720 of SEQ ID NO:1.

30. (New) The isolated nucleic acid molecule of claim 28 encoding SEQ ID NO:2.

31. (New) The isolated nucleic acid molecule of claim 29 comprising SEQ ID NO:1.

32. (New) A vector for transforming a plant cell comprising the nucleic acid of claim 27.

33. (New) A transformed plant cell comprising the vector of claim 32.

34. (New) An isolated nucleic acid molecule comprising SEQ ID NO:1.

35. (New) A vector for transforming a plant cell comprising the nucleic acid of claim 34.

36. (New) A transformed plant cell comprising the vector of claim 35.